Remarks

The Applicants do not believe that entry of the foregoing amendment will result in the entry of new matter into the present application for invention. Therefore, the Applicants respectfully request that the foregoing amendment be entered and that the claims to the invention be, kindly, reconsidered. The Final Office Action dated March 24, 2004 has been received and considered by the Applicant. Claims 1-42 are currently pending in the present application for invention. Claims 1-34, 36, 37 and 39-42 stand rejected by the Final Office Action dated March 24, 2004. Claims 35 and 38 are objected to but are states as being allowable. The foregoing amendment adds new claims 43-55 which are formed from independent claims 1, 5, 9, 11, 26, 30 and 32 within the additional limitations of Claims 35 and 38 that the Examiner states are allowable. Therefore, the Applicant requests that the forgoing amendment be entered because the added claims recite elements that have already been examined.

The Final Office Action dated March 24, 2004 rejects claims 25-34, 36, 37 and 39-42 under the provisions of 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out the invention. Regarding Claim 25, the Examiner sates there is insufficient antecedent basis for the term "the encoder means". The Applicants respectfully point out that encoder means are properly introduced into Claims 25 and that articles are not required to introduce means elements. Each of the remaining items mentioned in this rejection by the Examiner have been corrected by the foregoing amendment to the claims.

The Final Office Action dated March 24, 2004 rejects claims 9, 10, 16 30 and 31 under the provisions of 35 U.S.C. §101 as being directed to non-statutory subject matter. The Examiner states that data on a disk is not statutory unless that data is a data structure. The Applicant, respectfully, disagrees with this assertion contained in the Office Action. The Applicant, respectfully, asserts that claims 9, 10 and 16 recite statutory subject matter. Claims 9, 10 and 16 each recite a medium mark, wherein a content of said medium mark comprises a first bitpattern, and recorded user information encoded with a watermark representing a second bitpattern having a predefined relationship with the first bitpattern whereby the relationship between the second bitpattern and the content of the first bitpattern can be verified in a computer process. The Applicant, respectfully, submits that the foregoing passage clearly recites statutory subject matter.

Serial No. 09/013,541   16

In response to the Applicant's argument present in response to the previous office action, the Examiner states that by using the terminology "a relationship that can be verified by a computer process avoids forcing the implementation of a computer process, which would make the claim statutory. The Applicant, respectfully, disagrees with these assertions made by the Examiner. It is not necessary to force implementation by a computer, it is only required that the contents of the information carrier can be used by a computer. The Applicant, respectfully, draws the Examiner's attention to explanation for "functional descriptive material" versus "nonfunctional descriptive material" contained in the MPEP at §2106 IV B.1. Here, it states that descriptive material can be either "functional descriptive material" or "nonfunctional descriptive material." The definition for "functional descriptive material" is given as consisting of data structures and computer programs which impart functionality *when* employed as a computer component. [Emphasis added]. The Applicant, respectfully, points out that is not a requirement that claim recite the actual performance upon a computer of the functionality, it is only required that data structures and computer programs embodied by the claim recitation impart functionality *when* employed as a computer component.

The Applicant further points out that the definition of a "data structure" as given in the MPEP at §2106 IV B.1 is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." This definition of "data structure" used by the MPEP at §2106 IV B.1 is from The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993). The Applicant, respectfully submits that the rejected claims clearly provide a physical or logical relationship among data elements, i.e. a medium mark represented by a first bitpattern and a watermark representing a second bitpattern having a predefined relationship to the first bitpattern. There is clearly at least a logical relationship between the first and second bit patterns. The first and second bit patterns in fact include specific the recitation of a predefined relationship with each other. Moreover, the rejected claims recite elements that support specific data manipulation. For example, rejected Claim 9 provides the recitation "whereby the relationship between the second bitpattern and the content of the first bitpattern can be verified in a computer process." Claim 16 depends from Claim 9 and further defines that the relationship as including a cryptographic function, and that the relationship includes a one-way function; and the second bitpattern identifies encoded user information. It is sufficient under the provisions of 35

Serial No. 09/013,541   17

U.S.C. §101 that the data structures and computer programs employed impart functionality. The Applicant, respectfully, asserts that elements recited by the rejected claims impart functionality and therefore, recite statutory matter under the provisions of 35 U.S.C. §101.
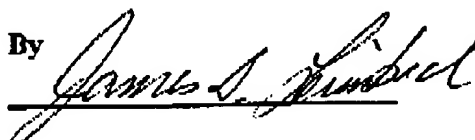
The Final Office Action dated March 24, 2004 rejected Claims 1-34, 36, 37 and 39-42 under the provisions of 35 U.S.C. §103(a) as being obvious over U. S. Patent No. 5,761,301 issued in the name of Oshima et al. (Oshima et al.) in view of U. S. Patent No. 6,205,249 issued in the name of Moskowitz (Moskowitz) and U. S. Patent No. 5,946,286 issued in the name of Bahns (Bahns). Specifically, the Examiner states that Oshima et al. teaches a medium mark and a digital signature on an optical disk. The Examiner further states that Moskowitz teaches embedding digital signatures into content as watermarks and that Bahns teaches watermarking an optical disc.

The Applicant would like to, respectfully, point out that the reject claims to the present invention recite elements defining first and second bitpatterns having a predefined relationship. The medium mark is defined as comprising the first bitpattern and an embedded watermark is defined as comprising the second bitpattern. To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). The Examiner has cited a portion of Moskowitz discusses keys being used to encode digital watermarks. However, the cited portion of Moskowitz does not disclose, or suggest, a first bitpattern is employed for a medium mark and a second bitpattern is employed for a watermark, with the first and second bitpatterns having a predefined relationship. The Examiner cites a portion of Bahns which discloses an image 22 formed on a disc 20 as a picture formed within the structure of the disc against the elements of the present invention that recite defining first and second bitpatterns having a predefined relationship used to encode digital watermarks. The Applicant does not concur that a picture formed on a disc reads on the elements of the rejected claims that specifically recite first and second bitpatterns having a predefined relationship. Simply put, this rejection does not address the specific subject matter defined by the rejected claims of medium mark comprising the first bitpattern and the embedded watermark as comprising the second bitpattern wherein the first and second bitpatterns have a predefined relationship. Accordingly, this rejection is, respectfully, traversed.

In view of the foregoing amendment and remarks, the Applicant believes that the present application is in condition for allowance, with such allowance being, respectfully, requested.
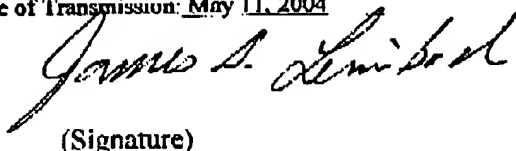
Respectfully submitted,

By

James D. Leimbach, Reg. 34,374
Patent Attorney (585) 381-9983

Serial No. 09/013,541   19